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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/867,363	05/29/2001	Chidambaram Krishnan	010094	5659

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QUALCOMM, INC
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ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/867,363	KRISHNAN ET AL.
Office Action Summary	Examiner	Art Unit
	Aravind K. Moorthy	2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-72* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. This is in response to the arguments filed on 17 January 2006.

2. Claims 1-72 are pending in the application.

3. Claims 1-72 have been rejected.

Response to Arguments

4. Applicant's arguments with respect to claims 49-72 have been considered but are moot in view of the new ground(s) of rejection.

5. Regarding claims 1-48, applicant's arguments filed 17 January 2006 have been fully considered but they are not persuasive.

On page 15, the applicant argues that Granstam fails to disclose or suggest supplying power to the SIM when a request is pending for service by the SIM, or supplying power to the SIM when a software module running on the WCD request maintenance of power to the SIM, or terminating power to the SIM when no request is pending for service by the SIM and now software module running on the WCD requests maintenance of power to the SIM.

The examiner respectfully disagrees. Granstam was not used to teach supplying power to the SIM when a request is pending for service by the SIM, or supplying power to the SIM when a software module running on the WCD request maintenance of power to the SIM, or terminating power to the SIM when no request is pending for service by the SIM and now software module running on the WCD requests maintenance of power to the SIM.

On page 16, the applicant argues that the Koilpillai reference does not teach anything with respect to SIMs. The applicant argues that Koilpillai describes conventional power conservation techniques in which a WCD (not a SIM) is put into a sleep mode. The applicant

argues Koilpillai does not suggest powering a SIM and terminating power to the SIM during

operation of the WCD, much less the specific contingencies required by claims 1, 17 and 33

when power is supplied to the WCD.

The examiner respectfully disagrees. Koilpillai was not used to teach SIMs. Granstam

teaches a SIM in a mobile phone. The examiner asserts that the combination of Granstam and

Koilpillai was used to teach powering a SIM and terminating power to the SIM during operation

of the WCD, much less the specific contingencies required by claims 1, 17 and 33 when power is

supplied to the WCD.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

6. Claims 49, 57 and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by Leickel

et al U.S. Patent No. 6,696,919 B1.

As to claims 49, 57 and 65, Granstam et al discloses a method comprising:

storing a user access code associated with a subscriber identity module

(SIM) in a memory associated with a wireless communication device (WCD) in

response to a user entering the access code at initial power up of the WCD

[column 4, lines 28-48];

retrieving the user access code from the memory when power is resupplied

to the SIM [column 4, lines 28-48]; and

using the retrieved user access code in a security authorization process in

the WCD to authorize use of secure features of the SIM [column 4, lines 28-48].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-5, 7-9, 11-13, 16-21, 23-25, 27-29, 32-37, 39-41, 43-45 and 48 are rejected under

35 U.S.C. 103(a) as being unpatentable over Granstam et al U.S. Patent No. 6,587,691 B1 in

view of Koilpillai et al U.S. Patent No. 6,678,508 B1.

As to claims 1, 2, 8, 9, 17, 18, 24, 25, 33, 34, 40 and 41, Granstam et al discloses a

method for controlling power to a subscriber identity module (S1M) in a wireless

communication device (WCD) when power is supplied to the WCD during operation of the

WCD [column 7, lines 44-49].

Granstam et al does not teach supplying power to the SIM when a request is pending for

service by the SIM. Granstam et al does not teach supplying power to the SIM when a software

module running on the WCD requests maintenance of power to the SIM. Granstam et al does

not teach terminating power to the SIM when no request is pending for service by the SIM and

no software module running on the WCD requests maintenance of power to the SIM. Granstam

et al does not teach re-initiating supply of power to the SIM following termination of power to the SIM when a request from the WCD is pending for service by the SIM. Granstam et al does not teach that the SIM includes an interface circuit that interfaces with the WCD, and terminating power to the SIM includes terminating power to the interface circuit. Granstam et al does not teach that the SIM includes a power supply line coupled to the WCD, and terminating power to the SIM includes terminating power to the power supply line.

Koilpillai et al teaches supplying power to the WCD when a request is pending for service by the WCD [column 4 line 43 to column 5 line 56]. Koilpillai et al teaches supplying power to the WCD when a software module running on the WCD requests maintenance of power to the WCD [column 4 line 43 to column 5 line 56]. Koilpillai et al teaches terminating power to the WCD when no request is pending for service by the SIM and no software module running on the WCD requests maintenance of power to the WCD [column 4 line 43 to column 5 line 56]. Koilpillai et al teaches re-initiating supply of power to the WCD following termination of power to the WCD when a request from the WCD is pending for service by the WCD [column 4 line 43 to column 5 line 56]. Koilpillai et al teaches that the WCD includes an interface circuit that interfaces with the WCD, and terminating power to the WCD includes terminating power to the interface circuit [column 4 line 43 to column 5 line 56]. Koilpillai et al teaches that the WCD includes a power supply line coupled to the WCD, and terminating power to the WCD includes terminating power to the power supply line [column 4 line 43 to column 5 line 56].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Granstam et al does so that power would have been supplied to the SIM when a request was pending for service by the SIM. Power would

have been supplied to the SIM when a software module running on the WCD requested maintenance of power to the SIM. Power would have been terminated to the SIM when no request was pending for service by the SIM and no software module running on the WCD requested maintenance of power to the SIM. Supply of power would have been re-initiated to the SIM following termination of power to the SIM when a request from the WCD was pending for service by the SIM. The SIM would have included an interface circuit that interfaced with the WCD, and terminating power to the SIM would have included terminating power to the interface circuit. The SIM would have included a power supply line coupled to the WCD, and terminating power to the SIM would have included terminating power to the power supply line.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Granstam et al by the teaching of Koilpillai et al because it provides a mobile communication de3vice that has the benefits of improved power conservation [column 2, lines 9-12].

As to claims 3, 19 and 35, Granstam et al teaches determining whether a request from the WCD is pending for service by the SIM by inspecting a request queue associated with the SIM [column 7 line 62 to column 8 line 9].

As to claims 4, 20 and 36, Granstam et al teaches re-initiating supply of power to the SIM when a software module running on the WCD requests supply of power to the SIM [column 7, lines 44-49].

As to claims 5, 21 and 37, Granstam et al teaches determining whether a software module running on the WCD requests supply of power to the SIM by polling any of a plurality of software modules running on the WCD [column 7, lines 44-49].

As to claims 7, 23 and 39, Granstam et al teaches supplying power to the SIM includes maintaining power to the SIM [column 7, lines 44-49].

As to claims 11 and 27, Granstam et al teaches the method further comprising:

storing a user access code associated with the SIM in a memory associated with the WCD in response to a user entering the access code at an initial power up of the WCD [column 6, lines 19-38];

retrieving the user access code from the memory when power is supplied to the SIM following the termination of power to the SIM [column 6, lines 19-38]; and

using the retrieved user access code in a security authorization process in the WCD to authorize use of secure features of the SIM [column 6, lines 19-38].

As to claims 12, 28 and 44, Granstam et al teaches storing the user access code includes storing the user access code upon the termination of power to the SIM [column 6, lines 19-38].

As to claims 13, 29, 45, 53, 61 and 69, Granstam et al teaches that the SIM is one of a removable user identification module (R-UIM) [column 6, lines 18-41] and a GSM SIM [column 6, lines 19-38], and the user access code is a card holder verification (CHV) code [column 6, lines 19-38].

As to claims 16, 32, 48, 56, 64 and 72, Granstam et al teaches that the WCD is one of a cellular radiotelephone, a satellite radiotelephone, a PCMCIA card, and a PDA that communicates according to one of the CDMA standard, the GSM standard, and the WCDMA standard [column 6, lines 19-38].

As to claim 43, Granstam et al teaches the instructions cause the processor to:

store a user access code associated with the SIM in a memory associated with the WCD [column 6, lines 19-38];

retrieve the user access code from the memory when power is supplied to the SIM following the termination of power to the SIM [column 6, lines 19-38]; and

use the retrieved user access code in a security authorization process in the WCD to authorize use of the WCD [column 6, lines 19-38].

8. **Claims 6, 22 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granstam et al U.S. Patent No. 6,587,691 B1 and Koilpillai et al U.S. Patent No. 6,678,508 B1 as applied to claims 1, 17 and 33 above, and further in view of Deschepper et al U.S. Patent No. 6,741,848 B2.**

As to claims 6, 22 and 38, the Granstam-Koilpillai combination does not teach asserting respective bits in a data structure when corresponding software modules running on the WCD request supply of power to the SIM. The Granstam-Koilpillai combination does not teach determining whether a software module running on the WCD requests supply of power to the SIM by analyzing the data structure. The Granstam-Koilpillai combination does not teach when any of the bits in the data structure is asserted, supplying power to the SIM.

Deschepper et al teaches asserting respective bits in a data structure [column 3, lines 3-20]. Deschepper et al teaches analyzing the data structure [column 3, lines 21-32].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Granstam-Koilpillai combination so that respective bits in a data structure would have been asserted when corresponding software

modules running on the WCD requested supply of power to the SIM. It would have been determined whether a software module running on the WCD requested supply of power to the SIM by analyzing the data structure. When any of the bits in the data structure were asserted, power would have been supplied to the SIM.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Granstam-Koilpillai combination by the teaching of Deschepper et al because it continues to increase computer system functionality as user needs evolve, modifications to existing components can be prohibitively costly and can limit backward-compatibility. To date, no one has designed a computer system to transmit more than eight bits of information on an eight-bit serial bus [column 3, lines 49-54].

9. Claims 10, 26 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granstam et al U.S. Patent No. 6,587,691 B1 and Koilpillai et al U.S. Patent No. 6,678,508 B1 as applied to claims 1, 17 and 33 above, and further in view of Eber et al U.S. Patent No. 6,595,414 B1.

As to claims 10, 26 and 42, the Granstam-Koilpillai combination teaches that the SIM includes an interface circuit that interfaces with the WCD, as discussed above.

The Granstam-Koilpillai combination does not teach that the interface circuit includes a clock input to the SIM. The Granstam-Koilpillai combination does not teach that terminating power to the SIM includes terminating power after terminating a clock signal to the clock input.

Eber et al teaches that the interface circuit that includes a clock input [column 8, lines 14-36]. Eber et al teaches terminating power includes terminating power after terminating a clock signal to the clock input [column 8, lines 14-36].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Granstam-Koilpillai combination so that the interface circuit would have included a clock input to the removable user identity module. Power would have been terminated to the SIM and included terminating power after terminating a clock signal to the clock input.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Granstam-Koilpillai combination by the teaching of Eber et al because it limits the range over which communication is possible between the known data carrier and a write/read station adapted to cooperate with this data carrier [column 2, lines 1-24].

10. Claims 14, 15, 30, 31, 46 and 47 rejected under 35 U.S.C. 103(a) as being unpatentable over Granstam et al U.S. Patent No. 6,587,691 B1 and Koilpillai et al U.S. Patent No. 6,678,508 B1 as applied to claims 1, 17, 33, 49, 57 and 65 above, and further in view of Timonen et al U.S. Patent No. 6,741,848 B2.

As to claims 14, 15, 30, 31, 46 and 47, the Granstam-Koilpillai combination teaches that the user access code is a personal identification number (PIN), as discussed above. Granstam et al teaches that the SIM is one of a removable user identification module (R-UIM) and a GSM SIM, as discussed above.

The Granstam-Koilpillai combination does not teach that the SIM is a universal subscriber identification module (USIM).

Timonen et al teaches a SIM that is a universal subscriber identification module (USIM) [column 16, lines 14-23].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Granstam-Koilpillai combination so that the SIM would have been replaced by a universal identification module (USIM).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the Granstam-Koilpillai combination by the teaching of Timonen et al because it can be used for user identification and interoperability between mobile communications systems and the GSM system [column 16, lines 14-23].

11. Claims 50-53, 56, 58-61, 64, 66-69 and 72 rejected under 35 U.S.C. 103(a) as being unpatentable over Leickel et al U.S. Patent No. 6,696,919 B1 as applied to claims 49, 57 and 65 above, and further in view of Koilpillai et al U.S. Patent No. 6,678,508 B1.

As to claims 50, 58 and 66, Leickel et al does not teach the method further comprising:

terminating power to the SIM when no request from the WCD is pending for service by the SIM and no software module running on the WCD requests supply of power to the SIM; and

terminating power to the SIM when power to the WCD is terminated.

Koilpillai et al teaches:

terminating power to the SIM when no request from the WCD is pending for service by the SIM and no software module running on the WCD requests supply of power to the SIM [column 4 line 43 to column 5 line 56]; and

terminating power to the SIM when power to the WCD is terminated [column 4 line 43 to column 5 line 56].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Leickel et al so that power would have been terminated to the SIM when no request from the WCD was pending for service by the SIM and no software module running on the WCD requested supply of power to the SIM. Power to the SIM would have been terminated when power to the WCD was terminated.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Leickel et al by the teaching of Koilpillai et al because it provides a mobile communication de3vice that has the benefits of improved power conservation [column 2, lines 9-12].

As to claims 51, 59 and 67, Leickel et al teaches he method further comprising:

retrieving and using the user access code when power is resupplied to the SIM following termination when no request from the WCD is pending for service by the SIM and no software module running on the WCD requests supply of power to the SIM [column 5 line 40 to column 6 line 27]; and

accepting and using user input as the user access code when power is resupplied to the SIM following termination when power to the WCD is terminated [column 5 line 40 to column 6 line 27].

As to claims 52, 60 and 68, Leickel et al teaches storing the user access code includes storing the user access code when power to the SIM is terminated [column 5 line 40 to column 6 line 27].

As to claims 53, 61 and 69, Leickel et al teaches that the SIM is one of a removable user identification module (R-UIM) [column 6, lines 18-41] and a GSM SIM [column 4, lines 49-58], and the user access code is a card holder verification (CHV) code [column 4, lines 49-58].

As to claims 56, 64 and 72, Leickel et al teaches that the WCD is one of a cellular radiotelephone, a satellite radiotelephone, a PCMCIA card, and a PDA that communicates according to one of the CDMA standard, the GSM standard, and the WCDMA standard [column 4, lines 28-48].

12. Claims 54, 55, 62, 63, 70 and 71 rejected under 35 U.S.C. 103(a) as being unpatentable over Leickel et al U.S. Patent No. 6,696,919 B1 as applied to claims 49, 57 and 65 above, and further in view of Timonen et al U.S. Patent No. 6,741,848 B2.

As to claims 54, 55, 62, 63, 70 and 71, Leickel et al teaches that the user access code is a personal identification number (PIN), as discussed above. Leickel et al teaches that the SIM is one of a removable user identification module (R-UIM) and a GSM SIM, as discussed above.

Leickel et al does not teach that the SIM is a universal subscriber identification module (USIM).

Timonen et al teaches a SIM that is a universal subscriber identification module (USIM) [column 16, lines 14-23].

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Leickel et al so that the SIM would have been replaced by a universal identification module (USIM).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Leickel et al by the teaching of Timonen et al because it

can be used for user identification and interoperability between mobile communications systems

and the GSM system [column 16, lines 14-23].

Conclusion

13.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this
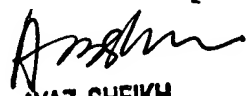
final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793.

The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aravind K Moorthy
March 27, 2006

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